

## **LISTING OF CLAIMS**

The following listing of claims is unchanged and remains pending in the present application.

### **LISTING OF CLAIMS**

1. (original) An object state transfer method in a data processing device comprising an application program, and a plurality of objects having internal states, which can be manipulated via an accessor method, the object state transfer method comprising the steps of:

arranging the internal states of the plurality of objects into a byte sequence, which is manipulated from the application program via the accessor method; and

transferring the internal states of the plurality of objects by transmitting the byte sequence to an external device.

2. (original) The object state transfer method as described in Claim 1, further comprising the steps of:

mapping an internal state of a new object to the byte sequence when the application program creates the new object; and

storing mapping data relating to the mapping.

3. (original) The object state transfer method as described in Claim 2, further comprising the step of:

when the application program has manipulated an internal state of an object by using the accessor method, setting a state in the byte sequence mapped to the internal

state or obtaining a state from the byte sequence, and returning the result to the application program.

4. (original) The object state transfer method as described in Claim 2, further comprising the step of:

transferring the byte sequence which holds the internal states of the objects and the stored mapping data to another data processing device which reproduces the objects.

5. (original) The object state transfer method as described in Claim 2, further comprising the step of:

when the application program has determined that an object becomes unnecessary, canceling the mapping between the byte sequence and the internal state of the object, and updating the mapping data.

6. (original) The object state transfer method as described in Claim 2, wherein the other data processing device which reproduces the objects performs the steps of:

receiving the byte sequence and the mapping data, transferred by using the object state transfer method as described in Claim 2;

updating a byte sequence and mapping data in the other data processing device based on the received byte sequence and mapping data, and

reproducing the objects based on the updated byte sequence and mapping data.

7. (original) An object state transfer device in a data processing device comprising an application program, and a plurality of objects having internal states, which can be manipulated via an accessor method, the object state transfer device comprising:

a region for transfer where internal states of the objects are arranged as a byte sequence;

a mapping data memory unit which stores mapping data relating to the internal states of the objects and the byte sequence; and

a transfer unit which transmits the byte sequence stored in the region for transfer and the mapping data to another data processing device.

8. (original) The object state transfer device as described in Claim 7, further comprising:

an object creation unit which, in compliance with an object creation command from the application program, performs mapping of the byte sequence and an internal state of an object to be created, stores the position of the internal state in the byte sequence into the mapping data memory unit, creates the object, and sets in the created object the position of the internal state in the byte sequence; and

a unit which, in compliance with a command to manipulate an internal state of an object from the application program via the accessor method, sets a state in the byte sequence comprising the region for transfer, or obtains a state from the byte sequence, and returns the result to the application program.

9. (original) An object state transfer device in a data processing device comprising an application program, and a plurality of objects having internal states, which can be manipulated via an accessor method, the object state transfer device comprising:

a region for transfer where internal states of the objects are arranged as a byte sequence;

a mapping data memory unit which stores mapping data relating to the internal states of the objects and the byte sequence;

a reproduction unit which receives a byte sequence representing internal states of objects transmitted from another data processing device, and mapping data relating to mapping between the internal states of the objects and the byte sequence, updates the byte sequence and the mapping data within the device itself based on the received byte sequence and mapping data, and reproduces objects having the same state as the other data processing device based on the updated byte sequence and mapping data; and

an object management unit which manages the reproduced object, and notifies the application program of data relating to the reproduced object.

10. (original) An object state transfer program which allows a computer to execute the object state transfer method as described in Claim 1.

11. (original) An object state transfer program which allows a computer to execute the object state transfer method as described in Claim 2.

12. (original) An object state transfer program which allows a computer to execute the object state transfer method as described in Claim 3.

13. (original) An object state transfer program which allows a computer to execute the object state transfer method as described in Claim 4.

14. (original) An object state transfer program which allows a computer to execute the object state transfer method as described in Claim 5.

15. (original) An object state transfer program which allows a computer to execute the object state transfer method as described in Claim 6.

16. (original) A recording medium for storing an object state transfer program which allows a computer to execute the object state transfer method as described in Claim 1.

17. (original) A recording medium for storing an object state transfer program which allows a computer to execute the object state transfer method as described in Claim 2.

18. (original) A recording medium for storing an object state transfer program which allows a computer to execute the object state transfer method as described in Claim 3.

19. (original) A recording medium for storing an object state transfer program which allows a computer to execute the object state transfer method as described in Claim 4.

20. (original) A recording medium for storing an object state transfer program which allows a computer to execute the object state transfer method as described in Claim 5.

21. (original) A recording medium for storing an object state transfer program which allows a computer to execute the object state transfer method as described in Claim 6.